Wyoming HIV Surveillance Program Epi Update for CAPPA Members

March 19, 2010
Cheryl Corbin
HIV Surveillance Coordinator

Table 1. Number of cases and deaths^a by status and age category, Wyoming, 1984 through December 31, 2009

Status		Adults or	Its or adolescents Children			en (<13 yrs)			Total			
Status	No.	%	Deaths	%	No.	%	Deaths	%	No.	%	Deaths	%
HIV infection (not AIDS)	106	30	9	8	3	50	0	0	109	30	9	8
AIDS - Immunologic	133	37	49	37	1	17	1	100	134	37	50	37
AIDS - All others	116	33	93	80	2	33	1	50	118	33	94	80
Total	355	100	151	43	6	100	2	33	361	100	153	42

AIDS immunologic case definition: CD4 count <200 cells/µl or CD4 percent <14% of total lymphocytes.

AIDS - All others case definition: Diagnosis of AIDS-defining illness/condition.

Table 2. Number of cases by age at diagnosis and sexb, Wyoming, 1984 through December 31, 2009

Age at	N	lale	Female		То	tal
diagnosis (yrs)	No.	%	No.	%	No.	%
<13	<5	-	<5	-	6	2
13-24	34	12	10	14	44	12
25-44	191	66	43	61	234	65
45-64	59	20	13	19	72	20
>=65	<5	-	<5	-	5	1
Total	291	-	70	-	361	100

Note. Data include cases with a diagnosis of HIV infection, a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS.

Note. Data exclude cases missing age at diagnosis.

^aDeaths among persons reported in the selected time period.

^bData exclude (0) persons with missing or unknown sex.

Table 3. Number of cases by race/ethnicity^c, Wyoming, 1984 through December 31, 2009

Doog/oth winity	Total				
Race/ethnicity	No.	%			
Hispanic, All races	33	9			
Not Hispanic, American Indian/Alaska Native	14	4			
Not Hispanic, Black or African American	22	6			
Not Hispanic, White	285	79			
Not Hispanic, Multi-race	5	1			
Other/Unknown	2	1			
Total	361	100			

Table 4a. Number of cases among adults or adolescents by transmission category and sex^d, Wyoming, 1984 through December 31, 2009

Transmission estament	M	ale	Female		Total	
Transmission category	No.	%	No.	%	No.	%
Male-to-male sexual contact	181	63	0	0	181	51
Injection drug use	37	13	20	29	57	16
Male-to-male sexual contact and injection drug use	35	12	0	0	35	10
Hemophilia/coagulation disorder	3	1	1	1	4	1
Heterosexual contact	5	2	39	57	44	12
Receipt of blood, components, or tissue	3	1	3	4	6	2
Perinatal exposure, HIV diagnosed >= 13 years old	0	0	0	0	0	0
Other risk factor reported	0	0	0	0	0	0
No identified risk factor (NIR) ^f	9	3	4	6	13	4
No risk factor reported (NRR) ^g	14	5	1	1	15	4
Total	287	100	68	100	355	100

Data exclude (0) adults or adolescents and (0) children <13 years missing race/ethnicity.

^dData exclude (0) adults or adolescents with unknown or missing sex.

eData exclude (0) children <13 years with unknown or missing sex.

^fNIR: After one year, or after investigation, no risk factor identified.

⁹NRR: No risk factor reported at the time of initial report.

Table 4b. Number of cases among children <13 years by transmission categorye, Wyoming, 1984 through December 31, 2009

Tuon aminaian aata aanu	То	otal
Transmission category	No.	%
Hemophilia/coagulation disorder	0	0
Mother with/at risk for HIV infection	4	67
Receipt of blood, components, or tissue	1	17
Other risk factor reported	0	0
No identified risk factor (NIR)f	1	17
No risk factor reported (NRR) ^g	0	0
Total	6	100

Table 5. Number of cases, deaths^h, and case fatality rates by time of diagnosis, Wyoming, 1984 through December 31, 2009

Time of diagnosis	No.	Deaths	Case fatality rate %
Before 1985	3	3	100
1985	8	7	88
1986	10	10	100
1987	12	9	75
1988	11	10	91
1989	22	18	82
1990	22	15	68
1991	23	18	78
1992	16	11	69
1993	15	6	40
1994	13	8	62
1995	15	7	47
1996	13	4	31
1997	15	4	27
1998	11	5	45
1999	9	1	11
2000	6	3	50
2001	11	0	0
2002	19	4	21
2003	12	1	8
2004	17	5	29
2005	11	1	9
2006	12	1	8
2007	14	1	7
2008	23	1	4
2009	18	0	0
Total	361	153	42

⁵

Table 6. Number of cases by county of residence at diagnosis, Wyoming, Cumulative, 1984 through December 31, 2009

Residence at diagnosis						
County	No.	%				
Albany	32	8.9				
Big Horn	1	0.3				
Campbell	16	4.4				
Carbon	20	5.5				
Converse	8	2.2				
Crook	4	1.1				
Fremont	27	7.5				
Goshen	13	3.6				
Hot Springs	3	0.8				
Johnson	1	0.3				
Laramie	96	26.6				
Lincoln	9	2.5				
Natrona	46	12.7				
Niobrara	2	0.6				
Park	5	1.4				
Platte	5	1.4				
Sheridan	11	3.0				
Sublette	2	0.6				
Sweetwater	24	6.6				
Teton	21	5.8				
Uinta	12	3.3				
Washakie	0	0.0				
Weston	3	0.8				
Total	361	100.0				

Wyoming HIV/AIDS Surveillance Summary January 1 through December 31, 2009

Table 1. Number of cases and deaths^a by status and age category, Wyoming, January through December 2009

Status	Adults or adolescents			Children (<13 yrs)			Total					
Status	No.	%	Deaths	%	No.	%	Deaths	%	No.	%	Deaths	%
HIV infection (not AIDS)	13	57	0	0	0	0	0	0	13	57	0	0
AIDS – Immunologic	8	35	0	0	0	0	0	0	8	35	0	0
AIDS - All Others	2	9	0	0	0	0	0	0	2	9	0	0
Total	23	100	0	0	0	0	0	0	23	100	0	0

AIDS immunologic case definition: CD4 count <200 cells/µl or CD4 percent <14% of total lymphocytes.

AIDS - All others case definition: Diagnosis of AIDS-defining illness/condition.

Table 2. Number of cases by age at diagnosis and sexb, Wyoming, January through December 2009

Age of diagraphic (vgs)	M	ale	Female		
Age at diagnosis (yrs)	No.	%	No.	%	
<13	0	0	0	0	
13-24	<5	-	<5	-	
25-44	11	61	<5	-	
45-64	6	33	<5	-	
>=65	<5	-	<5	-	
Total	18	-	5	-	

aDeaths among persons reported in the selected time period.

Wyoming HIV/AIDS Surveillance Summary January 1 through December 31, 2009

Table 3. Number of cases by race/ethnicity^c, Wyoming, January through December 2009

Race/ethnicity	To	otal
Race/etimicity	No.	%
Not Hispanic, White	18	78
Other/Unknown	5	22
Total	23	100

Table 4. Number of cases among adults or adolescents by transmission category and sex^d, Wyoming, January through December 2009

Transmission actors,	М	ale	Female		Total	
Transmission category	No.	%	No.	%	No.	%
Male-to-male sexual contact	12	67	0	0	12	52
Injection drug use	1	6	0	0	1	4
Male-to-male sexual contact and injection drug use	1	6	0	0	1	4
Hemophilia/coagulation disorder	0	0	0	0	0	0
Heterosexual contact	0	0	5	100	5	22
Receipt of blood, components, or tissue	0	0	0	0	0	0
Perinatal exposure, HIV diagnosed >= 13 years old	0	0	0	0	0	0
Other risk factor reported	0	0	0	0	0	0
No identified risk factor (NIR) ^f	0	0	0	0	0	0
No risk factor reported (NRR) ^g	4	22	0	0	4	17
Total	18	100	5	100	23	100

Data exclude (0) adults or adolescents and (0) children <13 years missing race/ethnicity.

^dData exclude (0) adults or adolescents with unknown or missing sex.

eDeaths among persons reported in the selected time period.

^fNIR: After one year, or after investigation, no risk factor identified.

Wyoming HIV/AIDS Surveillance Summary January 1 through December 31, 2009

Table 5. Number of cases, deathse, and case fatality rates by time of diagnosis, Wyoming, January through December 2009

Time of diagnosis	No.	Deaths	Case fatality rate %
2008	2	0	0
2009	21	0	0
Total	23	0	0

^eDeaths among persons reported in the selected time period.

Wyoming HIV/AIDS Surveillance Summary January 1 through December 31, 2009

Table 6. Number of cases by county of residence at diagnosis, Wyoming, January through December 2009

	Residence at diagnosis	·
County	No.	Percent
Albany	0	0
Big Horn	0	0
Campbell	1	4
Carbon	3	13
Converse	3	13
Crook	0	0
Fremont	1	4
Goshen	0	0
Hot Springs	0	0
Johnson	0	0
Laramie	7	30
Lincoln	0	0
Natrona	3	13
Niobrara	0	0
Park	1	4
Platte	0	0
Sheridan	0	0
Sublette	0	0
Sweetwater	1	4
Teton	0	0
Uinta	3	13
Washakie	0	0
Weston	0	0
Total	23	100

Wyoming HIV/AIDS Surveillance Summary HIV/AIDS Prevalence* as of December 31, 2009

Table 1. Table 1. Number of cases and deathsa by status and age category, Wyoming, December 2009

Ctatus	Adults or a	Adults or adolescents		Children (<13 yrs)		Total	
Status	No.	%	No.	%	No.	%	
HIV infection (not AIDS)	99	46	4	67	103	46	
AIDS - Immunologic	88	41	0	0	88	40	
AIDS - All others	29	13	2	33	31	14	
Total	216	100	6	100	222	100	

AIDS immunologic case definition: CD4 count <200 cells/ μ l or CD4 percent <14% of total lymphocytes.

AIDS - All others case definition: Diagnosis of AIDS-defining illness/condition.

Table 2. Number of prevalent cases by age at diagnosis, Wyoming, December 2009

Ana at diamancia (ma)	Total			
Age at diagnosis (yrs)	No.	%		
<13	6	3		
13-24	19	9		
25-44	156	70		
45-64	40	18		
>=65	<5	-		
Total	222	-		

^{*}Individuals living with HIV/AIDS in Wyoming. Includes Wyoming and non-Wyoming cases.

Note. Data include cases with a diagnosis of HIV infection, a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS.

aDeaths among persons reported in the selected time period.

Wyoming HIV/AIDS Surveillance Summary HIV/AIDS Prevalence* as of December 31, 2009

Table 3. Number of prevalent cases by race/ethnicity^b, Wyoming, December 2009

Događeth vinitu	Total			
Race/ethnicity —	No.	%		
Hispanic, All races	29	13		
Not Hispanic, American Indian/Alaska Native	10	5		
Not Hispanic, Black or African American	17	8		
Not Hispanic, White	159	72		
Not Hispanic, Multi-race	5	2		
Other/Unknown	2	1		
Total	222	100		

Table 4a. Number of prevalent cases among adults or adolescents by transmission category and sex^c, Wyoming, December 2009

Transmission actoriary	Male		Female		Total	
Transmission category	No.	%	No.	%	No.	%
Male-to-male sexual contact	103	63	0	0	103	48
Injection drug use	25	15	11	21	36	17
Male-to-male sexual contact and injection drug use	17	10	0	0	17	8
Hemophilia/coagulation disorder	1	1	1	2	2	1
Heterosexual contact	4	2	31	60	35	16
Receipt of blood, components, or tissue	1	1	0	0	1	0
Perinatal exposure, HIV diagnosed >= 13 years old	0	0	0	0	0	0
Other risk factor reported	0	0	0	0	0	0
No identified risk factor (NIR)e	8	5	7	13	15	7
No risk factor reported (NRR)f	5	3	2	4	7	3
Total	164	100	52	100	216	100

^bData exclude (0) adults or adolescents and (0) children <13 years missing race/ethnicity.

^cData exclude (0) adults or adolescents with unknown or missing sex.

^dData exclude (0) children <13 years with unknown or missing sex.

eNIR: After one year, or after investigation, no risk factor identified.

Wyoming HIV/AIDS Surveillance Summary HIV/AIDS Prevalence* as of December 31, 2009

Table 4b. Number of prevalent cases among children <13 years by transmission category^d, Wyoming, December 2009

Transmission actorsus	Total			
Transmission category	No.	%		
Hemophilia/coagulation disorder	0	0		
Mother with/at risk for HIV infection	5	83		
Receipt of blood, components, or tissue	0	0		
Other risk factor reported	0	0		
No identified risk factor (NIR) ^f	1	17		
No risk factor reported (NRR) ^g	0	0		
Total	6	100		

Additional Information about Wyoming Prevalent HIV/AIDS Cases

Cases as of 12/31/2009

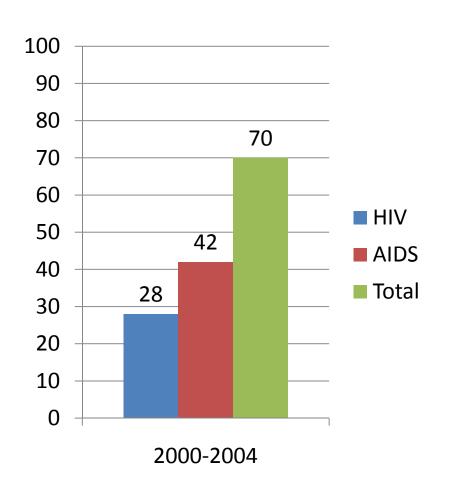
Residence					
County	Number	Percent			
Albany	14	6%			
Big Horn	<5	-			
Campbell	12	5%			
Carbon	16	7%			
Converse	5	2%			
Crook	<5	-			
Fremont	16	7%			
Goshen	<5	-			
Hot Springs	<5	-			
Johnson	<5	-			
Laramie	66	30%			
Lincoln	8	4%			
Natrona	29	13%			
Niobrara	<5	-			
Park	<5	-			
Platte	<5	-			
Sheridan	7	3%			
Sublette	<5	-			
Sweetwater	19	9%			
Teton	5	2%			
Uinta	8	4%			
Washakie	<5	-			
Weston	<5	-			
TOTAL	222	-			

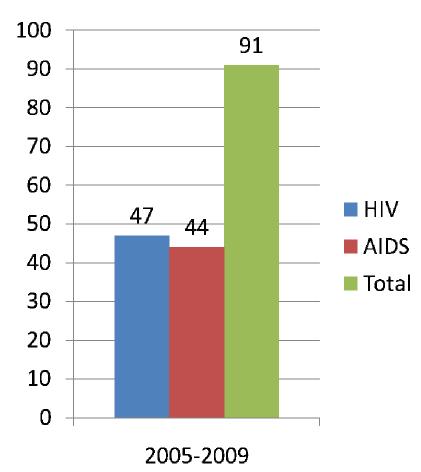
Case Ownership	#	%
Wyoming HIV	65	29
Other HIV	38	17
Wyoming AIDS	70	32
Other AIDS	49	22
Total	222	100

61% of prevalent cases were WY cases

Epidemiologic Update

Adult/Adolescent HIV and AIDS Cases, Reported 2000-2004 and 2005-2009, Wyoming





When comparing cases reported between 2000 and 2004 to cases reported between 2005 and 2009:

30% increase in total cases (from 70 to 91 cases)

68% increase in HIV only (not AIDS) cases (from 28 to 47 cases)

Diagnostic Status, Adult/Adolescent Cases

2000 - 2004

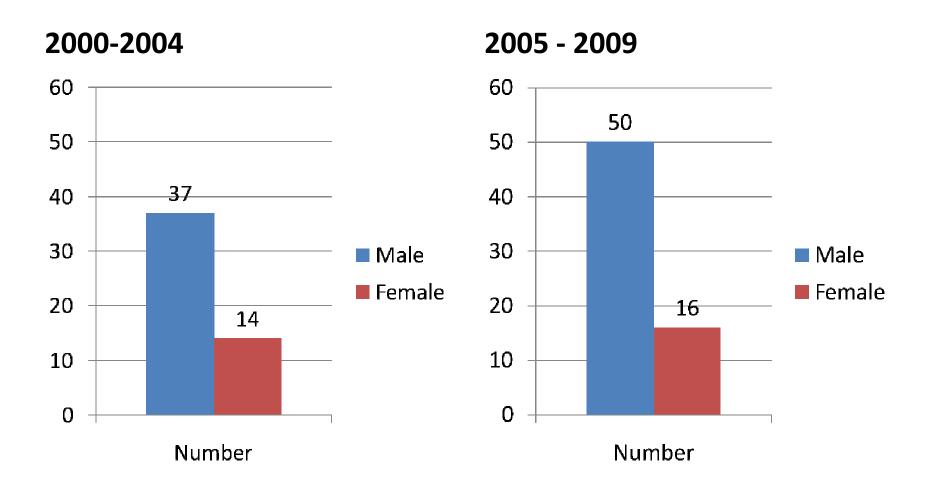
Status	#	%		
HIV (not AIDS)	28	40		
HIV/Later AIDS	19	27		
HIV/AIDS Simultaneous	23	33		
Total	70	100		
Newly Diagnosed (HIV + HIV/AIDS Simultaneous) = 51				

2005 - 2009

Status	#	%		
HIV (not AIDS)	47	52		
HIV/Later AIDS	25	27		
HIV/AIDS Simultaneous	19	21		
Total	91	100		
Newly Diagnosed (HIV + HIV/AIDS Simultaneous) = 66				

29% increase in newly diagnosed (HIV + only or HIV/AIDS diagnosed simultaneously) cases when comparing the two time periods.

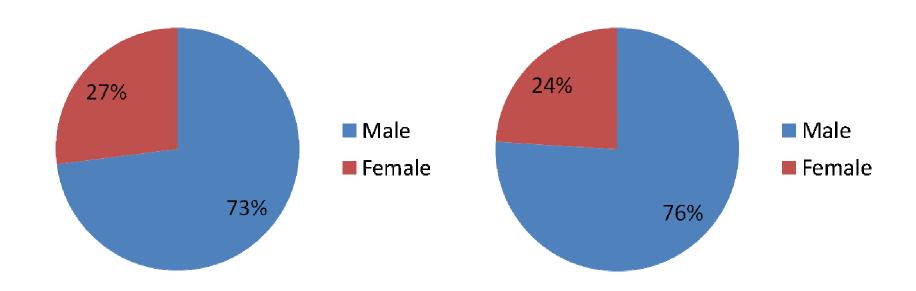
Newly Diagnosed HIV Disease by Gender, Adults/Adolescents, Wyoming



Proportional Distribution of Newly Diagnosed HIV Disease by Gender, Adults/Adolescents, Wyoming

2000 - 2004

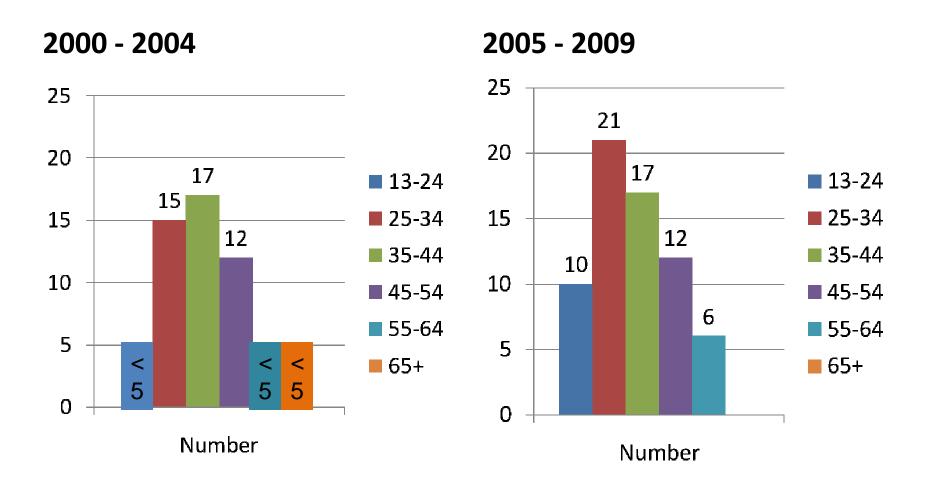
2005 - 2009



Cases among males increased 35% when comparing 2000-2004 (37 cases) to 2005-2009 (50 cases).

Cases among females remained relatively stable – increase of 2 cases when comparing the two time periods (14 to 16 cases).

Newly Diagnosed HIV Disease by Age Groups, Adults/Adolescents, Wyoming



The number of cases reported in the 13-24 age group was less than five during 2000-2004. During the period 2005-2009, ten cases were reported in this age group. (During the 10 year period, only three individuals aged less than 20 years in the 13-24 years age group.)

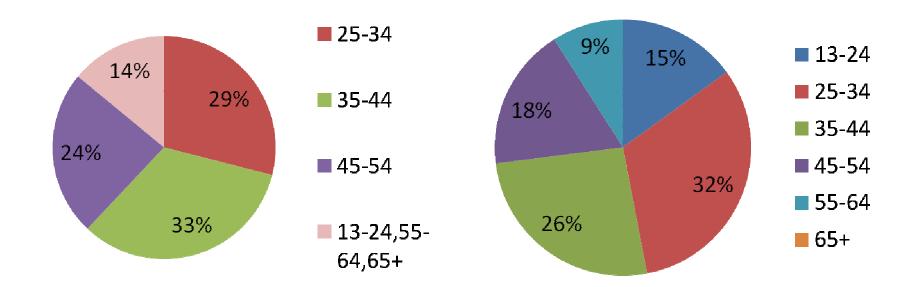
The number of individuals in the 25-34 increased from 15 to 21 cases.

Number of cases in reported among individuals aged 35 or greater remained stable.

Proportional Distribution of Newly Diagnosed HIV Disease by Age Groups, Adults/Adolescents, Wyoming

2000 - 2004

2005 - 2009



15% of newly diagnosed cases reported between 2005 and 2009 were aged 13 to 24 years.

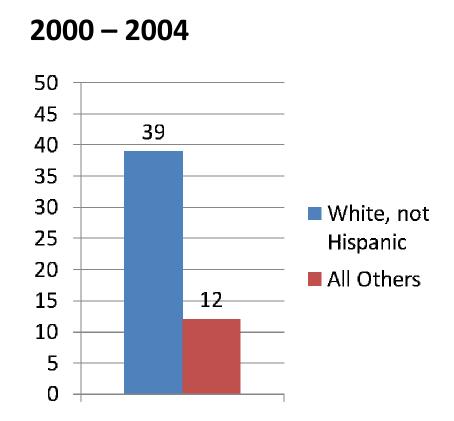
When comparing the two time periods:

25-34 age group represented 29% of cases during 2000-2004 and 32% during 2005-2009. Largest percentage of cases by age group during both time periods.

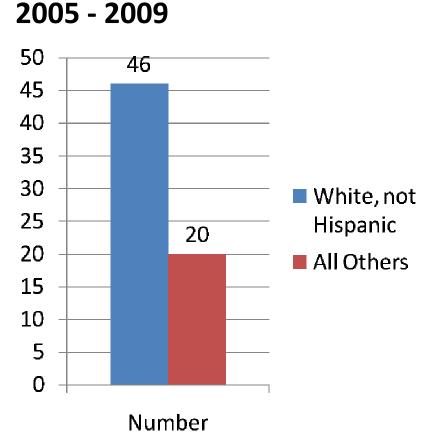
35-44 age group represented 33% of cases between 2000 and 2004 but represented 26% during the most recent time period.

Individuals aged 45 to 54 years accounted for 24% of newly diagnosed cases between 2000 and 2004 and 18% of cases 2005-2009.

Newly Diagnosed HIV Disease by Race/Ethnicity, Adults/Adolescents, Wyoming

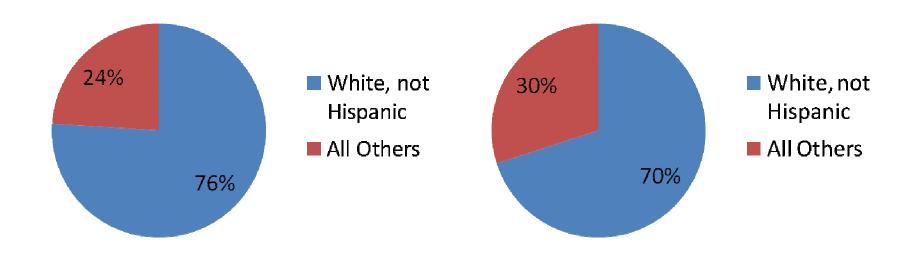


Number



Proportional Distribution of Newly Diagnosed HIV Disease by Race/Ethnicity, Adults/Adolescents, Wyoming

2000-2004 2005-2009



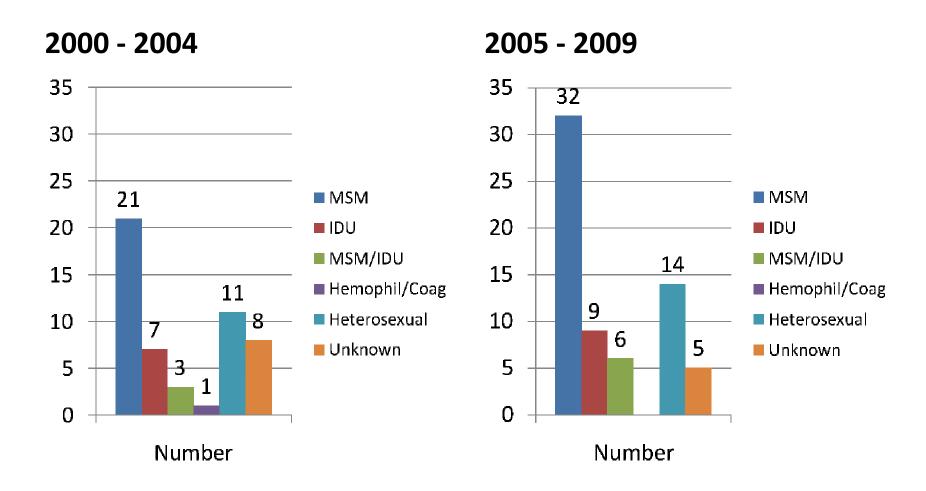
Cases among non-Whites (12) represented 24% of cases between 2000 and 2004 and increased to represent 30% of cases (20) during 2005-2009.

Number of cases among non-Whites less than five for all race/ethnic groups during 2000-2004.

During the period 2005-2009:

- Cases among persons of Hispanic ethnicity totaled eight or 12% of cases.
- Cases among Black/African Americans totaled five or 8% of cases.
- 10% of cases among other races (<5 per race category 7 cases total).

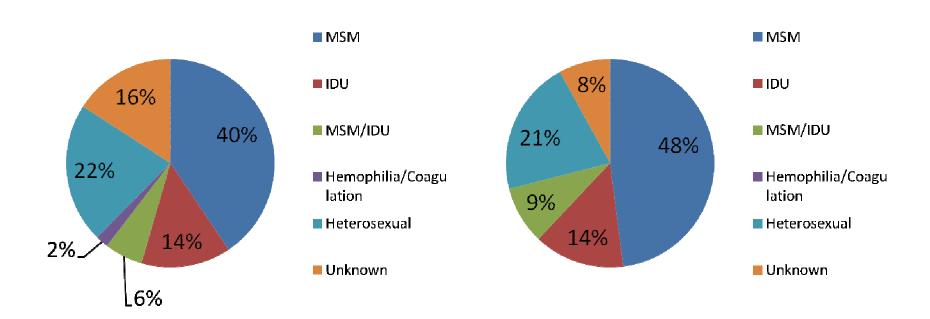
Newly Diagnosed HIV Disease by Exposure Categories, Adults/Adolescents, Wyoming



Proportional Distribution of Newly Diagnosed HIV Disease by Exposure Categories, Adults/Adolescents, Wyoming

2000 - 2004

2005 - 2009



When comparing newly dx'd cases reported 2000-2004 to 2005-2009:

By exposure category, cases among MSM accounted for the largest number and proportion of newly diagnosed cases for both time periods.

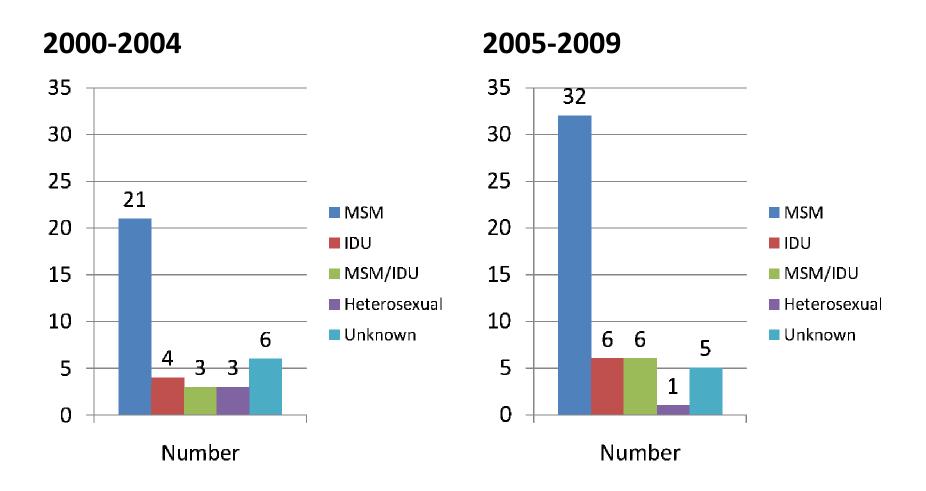
- MSM represented 40% of cases between 2000 and 2004 (21 cases) and represented 48% of cases reported between 2005 and 2009 (32 cases).

While IDUs represented 14% of cases during both time periods, the number of cases among IDUs increased from four to six when comparing the two time periods.

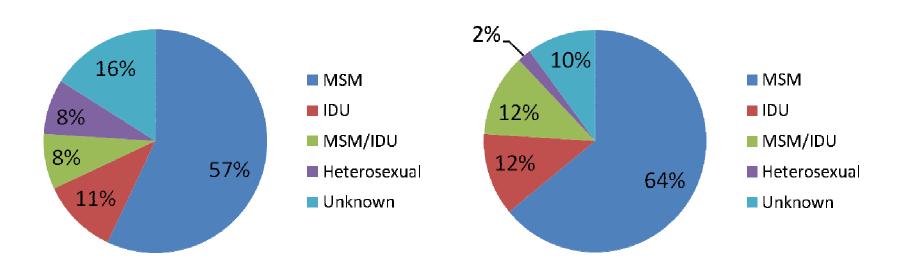
Cases among MSM/IDUs increased from 6% (three cases) to 9% (six cases) of all cases.

Cases acquired through heterosexual sex represented 22% (11 cases) of all cases during 2000-2004. Between 2005 and 2009, 14 individuals in this category represented 21% of all newly diagnosed cases.

Newly Diagnosed HIV Disease by Exposure Category, Adult/Adolescent Males, Wyoming

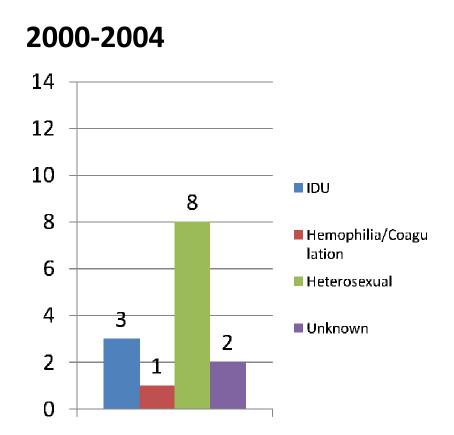


Proportional Distribution of Newly Diagnosed HIV Disease by Exposure Category, Adult/Adolescent Males, Wyoming 2000-2004 2005-2009

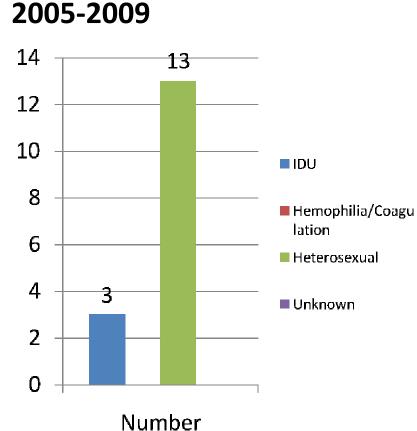


Cases among MSM increased from 57% of male cases during 2000-2004 to 64% of male cases during 2005-2009.

Newly Diagnosed HIV Disease by Exposure Categories, Adult/Adolescent, Females, Wyoming



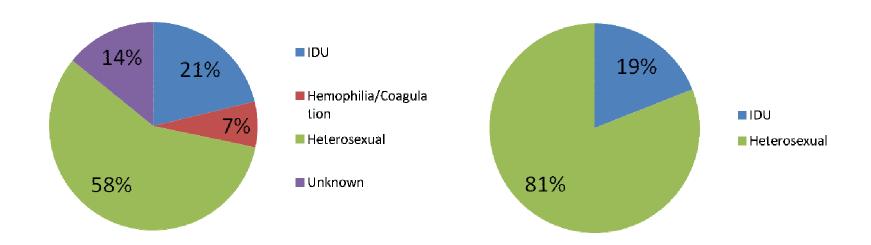
Number



Proportional Distribution of Newly Diagnosed HIV Disease by Exposure Categories, Adult/Adolescent Females, Wyoming

2000 - 2004

2005 - 2009



When comparing cases among females for the two time periods:

The number of female IDUs held steady with three cases reported in each time period.

Among females, IDUs represented 21% of cases during 2000-2004 and 19% of cases during 2005-2009.

Heterosexual contact represented 58% of cases among females between 2000 and 2004 and 81% of cases during 2005-2009.